

BEFORE THE
BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Accusation against:)

THOMAS HENRY LUTGE)

Case No. 859-A

370 Irwin Street)

San Rafael, CA 94901)

Civil Engineer License No. C 39743)

Structural Engineer License No. S 3160,)

Respondent.)

DECISION

The attached Proposed Decision of the Administrative Law Judge is hereby adopted by the Board for Professional Engineers, Land Surveyors, and Geologists as its Decision in the above-entitled matter.

This Decision shall become effective on April 13, 2012.

IT IS SO ORDERED March 8, 2012.

Original Signed

BOARD FOR PROFESSIONAL ENGINEERS,
LAND SURVEYORS, AND GEOLOGISTS
Department of Consumer Affairs
State of California

BEFORE THE
BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Accusation Against: THOMAS H. LUTGE, Civil Engineer License No. C 39743 Structural Engineer License No S 3160 Respondent.	No. 859-A OAH NO. 2010070906
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PROPOSED DECISION

Administrative Law Judge Perry O. Johnson, Office of Administrative Hearings, State of California (OAH), heard this matter on December 6, December 7, December 8, 2010, March 21, 2011, March 22, March 23, September 19, September 20, and September 21, 2011, at Oakland, California.

Deputy Attorney General Justin R. Surber represented Richard B. Moore, Executive Officer for the Professional Engineers, Land Surveyors, and Geologists, Department of Consumer Affairs, State of California.

Attorney Herman Franck and Attorney Elizabeth Betowski of the Law Offices of Franck and Associates, 1801 7th Street, Suite 150, Sacramento, California 95811, represented respondent Thomas H. Lutge, who attended all phases of the proceeding.

The record was held open to afford opportunities to the parties to file written closing arguments. On October 27, 2011, OAH received complainant's "Closing Argument," which was marked as Exhibit "20." Also on October 27, 2011, OAH received from respondent a written argument titled, "Defendant (sic) Thomas Lutge's Closing Trial Brief," which was marked as Exhibit "EEE." On November 29, 2011, OAH received "Thomas Lutge's Reply Closing Brief," which was marked as Exhibit "FFF." Also on November 29, 2011, OAH received "Complainant's Reply to Respondent's Closing Argument," which was marked as Exhibit "21."

On November 29, 2011, the parties were deemed to have submitted the matter for decision and the record closed.

FACTUAL FINDINGS

1. On January 19, 2010, complainant David E. Brown (complainant), in his official capacity as Executive Officer of the Board for Professional Engineers, Land Surveyors, and Geologists, Department of Consumer Affairs, State of California (the board), made the Accusation against Thomas Henry Lutge (respondent). And on November 17, 2010, complainant filed the Second Amended Accusation against respondent.

2. At the hearing, complainant amended the Second Amended Accusation as follows:

i. Under the First Cause for Discipline, in paragraph 18, subparagraph e, at page five, line 24, delete and withdraw the allegation: "Furthermore, Respondent omitted wind loads for an entire floor."

ii. Under the Third Cause for Discipline, in paragraph 20, subparagraph a, at page six, lines 22 through 24, delete and withdraw the entire allegation: "On pages 24 to 25: The design of the mat slab is inconsistent with the design drawings described in paragraphs 14 and 15 above. The spacing of the reinforcing rebar is closer in the calculation (4 inches) than it is on Page S6 and S7 of the drawings (12 inches)."

iii. Under the Sixth Cause for Discipline, in paragraph 23, subparagraph b, at page eight, lines 13 through 14, delete and withdraw the entire allegation: "On sheet S4: The size of the temporary shoring beam shown on existing [second] floor framing plan is not called out and the design of this beam was lacking in the calculations."

iv. Under the Sixth Cause for Discipline, in paragraph 23, subparagraph c, at page eight, line 16, the term "10'" [feet] is changed to "10'" [inches] so that the sentence now reads: "One value given is 10" and the next value is 11.25".

v. Under the Eighth Cause for Discipline, in paragraph 25, subparagraph c, at page nine, lines 19 through 20, delete and withdraw the entire allegation: "On sheet S4: The size of the temporary shoring beam shown on existing [second] floor framing plan is not called out and the design of this beam was lacking in the calculations."

vi. Under the Eighth Cause for Discipline, in paragraph 25, subparagraph d, at page nine, line 22, the term "10'" [feet] is changed to "10'"

[inches] so that the sentence now reads: "One value given is 10" and the next value is 11.25".

vii. Under the Tenth Cause for Discipline, under paragraph 27, subparagraph "f" is changed to paragraph "d."

License History

3. On August 23, 1985, the board issued Civil Engineer License Number C 39743 to respondent.

On November 19, 1988, the board issued Structural Engineer License Number S 3160 to respondent.

According to the certificate of licensure as presented at the hearing of his matter, respondent's licenses expired on December 31, 2011.

4. The Contractors State License Board has issued respondent a general building (Classification B) contractor's license, an engineering (Classification A) contractor's license and a steel reinforcing (Classification B-50) contractor's license.

Background

5. In approximately October 2005, respondent verbally agreed to enter into a contract with Robert and Tina Adams (homeowners) to perform services as a structural engineer. The agreement contemplated that respondent would provide structural engineering services by creating drawings and generating calculations that were legally sufficient to acquire building permit approval from a municipal building department and for use by a licensed building contractor for constructing a garage extension and installing foundation supports for the building's seismic upgrade along with an upgrade for a new elevator system at homeowners' residence at 359-361 Lombard Street, San Francisco, California (the project).

Complainant's Initial Investigative Action

6. On January 3, 2007, the board's Enforcement Unit received from homeowners a written complaint, dated December 28, 2006, against respondent. Homeowners alleged that they had hired respondent to provide services as a structural engineer and a general building contractor for the renovation project. The complaint alleged that a building permit to perform the work was never issued and that respondent had failed to adequately respond to issues of concern as raised by the San Francisco Department of Building Inspections. Homeowners' complaint was accompanied by a letter, dated December 29, 2006, by homeowners' attorney, Daron Tong, Esq. of McKague & Tong, LLP, which asked that the board transmit prospective communications to the attorney's office.

The board's Enforcement Analyst, Jacqueline Jenkins, made the first contact with the homeowners' attorney by way of a letter, dated January 21, 2007. That letter sought all plans, calculations and other documents associated with homeowners' relationship with respondent. By a letter, dated February 16, 2007, homeowners' lawyer sent some plans, written specifications, calculations and drawing as prepared by respondent for the project. Also, by a letter, dated March 12, 2007, Ms. Jenkins sent further correspondence to homeowners' lawyer, Mr. Tong, explaining that full-sized drawings were required for review by the board's personnel and agents. The letter explained that the board's personnel needed a copy of homeowners' contract with respondent. And by a letter, dated March 26, 2007, Mr. Tong replied by sending a set of folded plans, but the lawyer's letter stated that the contract with respondent was unavailable.

By a letter, dated April 4, 2007, Enforcement Analyst Jenkins made her first contact with respondent regarding homeowners' complaint. The letter informed respondent that homeowners' complaint alleged that their objective to secure a building permit was not attained because the San Francisco Department of Building Inspections had not approved respondent's calculations and drawings for the project of homeowners. The letter to respondent further noted that the city agency had refused to approve the application of the building permits because of, among other things, respondent's failure to adequately respond to the city agency's plan review comments and inquiries. The implication of homeowners' complaint against respondent was that he had breached the standard for professional conduct by a structural engineer regarding work to obtain requisite building permit approval. Further, the board's enforcement analyst's correspondence set out that homeowners' complaint conveyed that respondent had breached his contract with the homeowners to provide competent drawings and calculations that would enable homeowners to complete actual construction of their desired home improvements. And the letter by the enforcement analyst asked respondent to provide the board with "all documents" related to the project, including drawings, calculations and contracts.

On April 8, 2007, respondent sent a telefacsimile message to Ms. Jenkins. With his telefacsimile message, respondent sent the board's personnel copies of drawings and calculations that reflected his work product on homeowners' project. His responses consisted of approximately 140 pages along with many documents, including drawings, calculations that pertained to the garage extension and the seismic upgrade. Respondent's message also vehemently proclaimed that homeowners were, in essence, unethical, as their charges against him were fraudulent. And, on April 18, 2007, the board's personnel received from respondent a folded set of plans. In his responses, respondent indicated that the drawings and calculations were complete.

Thereafter for a period of approximately six months for the board's investigation to conclude (before an accusation was filed), respondent characterized the drawings and calculations, which are associated with him as the engineer, as being

complete. In the hundreds of pages of documents presented by respondent to the board's enforcement personnel during the course of the investigation, no entry was made by respondent that papers presented by him in support of the application for building approval permits were inexact, flawed, incomplete or not meeting the standards expected of an engineer.

Effective November 1, 2007, Enforcement Analyst Christine Doering assumed the lead in the investigation regarding homeowners' complaint against respondent. On approximately November 14, 2007, Ms. Doering reviewed respondent's telefacsimile message stating that homeowners had arranged from another structural engineer, named Pat Buscovich, to obtain building permit approval. Later respondent repeated in other facsimile communications (dated January 22, 23 and 24, 2008) the claim that Mr. Buscovich was hired by homeowners to obtain the permits and that respondent wished to make a complaint with the board against Mr. Buscovich for processing the application to obtain building permit approval.

On January 15, 2008, Enforcement Analyst Doering transmitted relevant documents to independent technical expert Tsuyoshi Bunden, a professional civil and structural engineer. The transmission was to gain an independent, yet industry expert-quality, assessment of respondent's acts or omissions pertaining to the project of homeowners. On May 27, 2008, the board's enforcement analyst received a report from Mr. Bunden.

Based on the opinions expressed by Mr. Bunden regarding his findings and determinations pertaining to respondent's negligence and incompetence, the Board Enforcement Unit forwarded its investigative files and related documents to the Attorney General's Office during May 2009, which was approximately one year after issuance of the report by Mr. Bunden.

Enforcement Analyst Tiffany Criswell completed the investigative report that led to the Accusation being filed in January 2010 against respondent. Respondent timely filed a Notice of Defense so that the hearing in this matter ensued.

Background

7. After respondent and homeowners had outlined the scope of respondent's objectives in performing services as a professional engineer, respondent prepared a draft written contract, dated October 17, 2005.¹ (At all times germane to

¹ The draft contract was titled, "Structural Design Proposal Work Authorization and Agreement." The document set out a "project description" as: "The design is to provide a new perimeter foundation system for the solid rock site to replace the existing deteriorated leaking brick masonry walls. A matt slab will be placed to span over the new garage extension and then the new garage extension in the rear will be designed with the new elevator shaft"

this matter, homeowners were residing in Hong Kong, China. Lawyers, first Elva Harding of Zacks, Utrecht and Leadbetter of San Francisco and then Mr. Tong, conducted, for the most part, homeowners' affairs with respondent.) Although by way of telefacsimile transmission, respondent sent the draft written contract to homeowners, the subject licensee did not secure homeowners' signatures upon the draft contract that pertained to the provision of his services as a professional engineer. In fact, respondent never obtained a signed engineering contract from homeowners.

Based upon the telephone consent by homeowner Robert Adams on approximately October 19, 2005, respondent embarked on the provision of professional services to prepare engineering drawings and calculations for the project. (The record suggests, however, that before October 2005, respondent embarked upon professional engineer services, in the way of consultancy work, for homeowners.) But homeowners, as respondent's clients for professional engineering services, never knowingly stated in writing after full disclosure of controlling provisions in the Professional Engineers Act that a contract, which complies with the requirements of Business and Professions Code section 6749, subdivision (a),² was not required by

The draft contract's "scope of services" reads: "The services that . . . [respondent] *have provided* and/or will provide include the following for a complete *permit service*:

1. Preliminary conferences with owner's architect and owner's geotechnical engineer to assist in developing the design.
2. *Preparation of complete structural permit drawings.*
3. *Preparation of complete structural permit drawings.*
4. Building department *plan check comment responses for permits* shall be completed upon payment for above and as required.

ALL SPECIAL INSPECTIONS AND CONSTRUCTION OBSERVATIONS SHALL BE AN ADDITION TO THIS PROPOSAL BASED ON HOURLY RATES. THIS PROPOSAL INCLUDES NO WORK PAST PERMIT APPROVAL.

(Italics added. All capitals in the original text.)

The draft contract included a caption "degree of care." In that contract provision respondent wrote: "My professional services are performed using that degree of care and skill exercised under similar circumstances by reputable structural engineers in this or similar localities."

² Business and Professions Code section 6749, subdivision (a), sets out, in part:

A professional engineer shall use a written contract when contracting to provide professional engineering services

homeowners.

8. At the outset of the relationship between respondent and homeowners, respondent inferred that he was to not only perform engineering services, but also he contemplated that he would be hired by homeowners to act as the general building contractor for the project.

9. Between mid-October 2005 and late January 2006, respondent performed engineering work in the way of preparing two sets³ of drawings and two

to a client pursuant to this chapter. The written contract shall be executed by the professional engineer and the client, or his or her representative, prior to the professional engineer commencing work, *unless the client knowingly states in writing that work may be commenced before the contract is executed*. The written contract shall include, but not be limited to, all of the following:

(1) A description of the services to be provided to the client by the professional engineer.

(2) A description of any basis of compensation applicable to the contract, and the method of payment agreed upon by the parties.

(3) The name, address, and license or certificate number of the professional engineer, and the name and address of the client.

(4) A description of the procedure that the professional engineer and the client will use to accommodate additional services.

(5) A description of the procedure to be used by any party to terminate the contract.

(Emphasis added.)

³ The calculations for the seismic upgrade are dated November 10, 2005. (Exhibits 4.5 and 8.) The drawings for the seismic upgrade are reflected in two hearing exhibits. (Exhibit 5, dated October 22, 2005, reflects respondent's signature and the drawings are inferred to be drawings submitted for permit issuance. Exhibit 12, dated both October 22, 2005, and January 27, 2006, is more complete version, but is devoid of a signature.)

sets of calculations for homeowners. One set of drawings and calculations pertained to the seismic upgrade for the project, while the other set of documents related to the garage extension. The calculations and drawings by respondent were as follows:

- i. Respondent prepared a set of calculations, dated November 10, 2005. That set of calculations was titled, "STRUCTURAL CALCULATION FOR: STRUCTURAL REHABILITATION WITH NEW SEISMIC UPGRADE/UMB WALL REMOVAL ADAMS RESIDENCE (the project)." That set of calculations consisted of 62 pages.
- ii. Respondent prepared another set of calculations, dated November 10, 2005. This set of calculations was titled, "STRUCTURAL CALCULATION FOR: BLOCK: 78 LOT: 31 EXISTING GARAGE EXTENSION UNDER REAR OF EXISTING BUILDING ADAMS RESIDENCE (the project)." That set of calculations consisted of 39 pages.
- iii. Respondent prepared another set of calculations, dated July 24, 2006; although two pages, namely pages 8 and 9, were dated November 10, 2005. This set of calculations was titled "PLAN CHECK COMMENT RESPONSE FOR: DEPARTMENT OF BUILDING INSPECTION." That set of calculations consisted of 13 pages.
- iv. Respondent prepared drawings, dated October 22, 2005. The drawings were titled, "STRUCTURAL REHABILITATION WITH NEW SEISMIC UPGRADE/ UMB WALL REMOVAL ADAMS RESIDENCE (the project)." That set of drawings reflected numbers of R-1 to R-3 and S1-S13.
- v. Respondent prepared additional drawings, dated October 22, 2005. The drawings were also titled "STRUCTURAL REHABILITATION WITH NEW SEISMIC UPGRADE/ UMB WALL REMOVAL ADAMS RESIDENCE (the project)." These drawings were numbered A1 to A9, S1 to S4, S4-A, S4-B, S5 to S13, and R1-R3.
- vi. And, respondent prepared drawings, dated November 2, 2005, November 10, 2005, and October 22, 2005. The drawings were titled, "EXISTING GARAGE EXTENSION UNDER REAR OF EXISTING BUILDING ADAMS RESIDENCE (the project)."

The calculations for the garage extension are dated November 2 and November 10, 2005. (Exhibit 9.) The drawings (Exhibit 13) for the garage extension are dated October 22, 2005, November 2, 2005, and November 10, 2005.

10. On December 14, 2005, respondent issued an invoice for \$9,998.68 for his services as a structural engineer. That invoice was satisfied when he received payment from homeowners by way of a check, dated January 20, 2006.

Through much of the year 2006, respondent provided structural engineering services to homeowners. By an invoice, dated September 11, 2006, he sought payment from homeowners for fees in an amount of \$7,440.

11. At the outset of his relationship with homeowners in mid-October 2005, respondent understood that tenants occupied the house constituting the project site. Homeowners hired attorney Elva Harding to prompt the tenants to vacate the premises. Upon learning of attorney Harding's mission to get the tenants out of the house, respondent fostered an idea, which he relayed to homeowners' lawyer. His idea entailed the crafting of an opinion letter regarding the unsafe nature of the building. And on October 19, 2005, he sent a letter to attorney Harding that described his opinion regarding the unsafe nature of the building. Respondent's suggested tactic for issuance of an opinion regarding the unsafe condition of the building was not adopted or endorsed by homeowners. Among other reasons, it is inferred that homeowners fostered apprehension that respondent might publically broadcast his opinion regarding the building supposed unsafe condition. That concern, among other things, prompted homeowners' lawyer, Ms. Harding, to hire another structural engineer to procure approval for building permits for the project.

Then homeowners, through attorney Harding, on October 14, 2005, took steps to hire another professional engineer named Pat Buscovich to act as a "permit expeditor" for the project. Respondent heard that homeowners decided to associate another engineer because of the person's knowledge regarding the politics, nuances and "ways" of the San Francisco Department of Building Inspection's (SFDBI) processes for issuance of approval for building permits. The original permit applications as made over the signature of Mr. Buscovich pertained to both the seismic upgrade and the garage extension. The first applications to SFDBI were submitted in December 2005. Although Mr. Buscovich's name and signature on the applications appeared as the permit expeditor and the agent to the homeowners, respondent's name appeared as the project's engineer of record.

On February 1, 2006, respondent sent homeowners' lawyers, Zach, Utrecht and Leadbetter - to the attention of Elva Harding, a transmittal letter along with "three sets of plans signed and stamped for permit" with regard to the project. The transmittal letter set forth that the plans were "for your use." Thereafter respondent's drawings and calculation for the project were placed into the possession of Pat Buscovich, the permit expeditor. The permit expeditor, or as he described himself-a "permit consultant"- submitted the drawings and calculation for permitting of the project by SFDBI. (For unknown reasons, Mr. Buscovich procrastinated in filing respondent's drawings and calculations.)

In late March 2006, Mr. Buscovich supplemented the original November 2005 permit applications by way of follow-up submissions. Respondent's name appeared as the engineer on permit application amendments.

12. In March 2006, respondent prepared and presented homeowners with a Home Improvement Contract. Under the written contract as submitted by respondent in the capacity as a general building contractor, respondent proposed work at the project consisting of constructing a "new garage extension and a new basement foundation with all structural rock bolts, underpinning, drainage, etc." Fifteen pages of drawings accompanied respondent's general building contractor's contract with homeowners. The contract price for the construction at the project was set at \$355,435. After homeowners' lawyer made amendments (addendum) to the written agreement, homeowners signed the contract on April 13, 2006. (Under the general building contractor's contract, through his company (QSE Construction), respondent only performed demolition and termite abatement work at the project site. Homeowners paid respondent \$70,000 on May 15, 2006, for the construction work. The record shows that building industry professionals later hired by homeowners estimated a value of \$8,000 for the construction work actually performed by respondent.)

13. Although respondent had not received a signed contract to provide services as a structural engineer with homeowners' signatures, nevertheless, he continued to act as both the engineer and the general building contractor on the project until approximately late July 2006.

14. In June 2006, a plan review engineer with SFDBI named Tom Bower sent homeowners and respondent a Plan Review Comments document. The SFDBI document noted that homeowners' application for building permits "is being withheld pending resolution of the following comments. Until then the application is considered incomplete . . . and is subject to cancellation" The focus of the plan review document entailed work described as "existing garage extension under rear of existing building." The comments included:

1. Provide approved application drawings showing the existing conditions concerning the existing dowels
2. Provide approved application drawings showing the existing conditions concerning steel beams . . . The approved application should show a plan view of the structural layout . . . [T]he plan should show the structural layout relative to the proposed work area.

3. Show elevator pit and shaft layout with details. Provide necessary calculations and details for structural loads.
4. Provide a letter from Geotechnical Engineer stating that the design and the shoring plan are in agreement with the geotechnical report. Shoring plan and calculations show an allowable bearing pressure of 4000 psf; however, the soils report states the allowable bearing pressure to be 3000 psf.
5. Provide a standard DBI special inspection form.
6. Provide calculations showing the forces that are acting on the tie back anchoring system
7. Show elevation defining the maximum depth of excavation

On July 24, 2004, Mr. Bower issued another Plan Review Comments document. The focus of the document, dated in July 2004, dealt with work described as "structural rehabilitation with voluntary seismic upgrade." The SFDBI document, under the Civil Engineering Plan Check, as addressed to respondent:

1. The shear wall on the first . . . level is being reduced in width and it is unclear if this wall will be strengthened as it does not have a shear wall designation that matches in the shear wall schedule. Furthermore, please differentiate the difference between a "20B" hold down and a "20" hold down for this wall.
2. Where the adjacent footing is involved, the owner of the adjacent structure must approve the shoring and excavation plan and adequate measures must be made to stabilize the soil under the adjacent structure's footing. Current plans do not specifically address the adjacent footing and how the soil will be stabilized Provide calculations for footing spanning between 36" columns in detail 6A and specify the maximum span allowed

Because both of the SFDBI plan check comments documents required a response from the project engineer, respondent replied immediately to the respective documents as to both the seismic upgrade and the garage extension. Respondent sent Mr. Bower approximately 50 pages of his handwritten comments, arguments, additional calculations, and explanatory drawings in order to gain approval of the applications for the building permits.

In his response to SFDBI regarding the garage extension drawings and calculations, respondent wrote, in part: "I did not have any dealings with this submittal by Expeditor Pat Buscovich, but I will easily take care of everything now! [Emphasis in text.] . . . [The garage extension application] is the 'over-the-counter, voluntary structural rehabilitation/V.M.B. wall removal' The permit should have been quickly approved 'over-the-counter' by hired permit expeditor Pat Buscovich As I look at all our produced documents and all the previous approved drawings all I see is one of the most over-designed, conservative and redundant jobs I have ever produced I would very much like to show you [that] these [are] complete documents [that] you have!" (Exclamation in text.)

Also regarding the garage extension, respondent informed the SFDBI review engineer that at least one page, namely S4, of the drawings was signed and stamped.

Over the span of his 50-page response to the SFDBI plan check comments document for the garage extension, respondent did not state or even suggest that any of the drawings or calculations, which were submitted with him as the responsible engineer, were incomplete or faulty. Rather his comments argued the subject engineering documents included "over-designed very conservative" representations, that his "design [was] massively over-designed as all [his] jobs [are] done for excessive safety." Respondent asked SFDBI to "please allow this over-design to be built soon!!!" (Exclamations in text.)

In response to the July 2005 plan check review comments regarding the "structural rehabilitation with voluntary seismic upgrade, which included an elevator remodel, respondent sent Mr. Bower of the SFDBI a response consisting of 11 pages. He included additional drawings and calculations. He repeatedly wrote "very conservative" to describe his drawings and calculations. And he ended his response to the plan check review for the seismic upgrade with, "Please accept that all aspects of this job are many times stronger than [required] as all our work always is!" (Exclamation and underline emphasis in text.)

Notwithstanding respondent's submission to SFDBI of more than 70 pages of explanations with additional calculations and drawings, no permits were issued. A reasonable inference is drawn that respondent failed to adequately address the concerns of the SFDBI plan review comment inquiries.

15. After respondent's inability to secure the permits from SFDBI and the failure to meet the construction completion date (mid-August 2006) for the garage extension work, homeowners became disenchanted with respondent.

By a letter, dated September 7, 2006, through attorney Daron D. Tong, homeowners formally terminated respondent's contracts, both verbal and written.

Thereafter homeowners and respondent engaged in litigation that resulted in a court trial in the Superior Court for San Francisco County. The trial resulted in a loss for all parties in that the homeowners' claims of breach of contract against respondent were defeated, respondent received a money judgment of one dollar (\$1) on his cross-complainant against homeowners, and the parties were ordered to bear their own costs of the litigation.

Respondent's Evidence at the Hearing

i. MR. DON DAVID

17. At the hearing of this matter, respondent called Mr. Don David⁴ as his expert witness.

Although Mr. David has been a licensed structural engineer since 1993, he has never served as an expert witness in either the superior court or an administrative adjudication proceeding. And he has never worked as a plan checker for any governmental agency.

At the hearing, Mr. David acknowledged that he was not familiar with the standard of professional care as developed for determination of board actions against professional engineers. And respondent's expert witness unpersuasively opined that the "standard of care" changes or alters between professional engineers depending on the location of the individual's practice, that is, between a unique setting as San Francisco versus a less urban, suburban or semi-rural region.

Mr. David's character for truthfulness was brought into question during cross-examination. In particular, there were several instances when respondent's expert witness was evasive and non-responsive to questions posed by complainant's counsel.

⁴ Mr. Don David earned a Bachelor of Science degree in Civil Engineering from West Virginia University in 1976. He began, but did not complete, a master's degree in Structural Dynamics at the University of Minnesota. Mr. David acquired a civil engineering license from the State of Minnesota in 1979. He moved to California in 1986. The State of California issued him a civil engineering license in 1989. Mr. David owns a structural engineering company located in San Francisco called Double D Engineering, which employs three other licensed structural engineers.

And Mr. David asserted at the hearing that in order to meet an objective to obtain permit approval that he had used a means of lying and misleading personnel within the SFDBI.

In his capacity as an expert witness, Mr. David asserted that in reaching the opinions, which he voiced in support of respondent's contentions, that he had not reviewed all of the relevant documents, reports, and drawings that were presented during the hearing of this matter.

Mr. David acknowledged that he had not reviewed and tested all calculations formulated or made by respondent. He proclaimed that as an engineer engaged in the practical work of getting projects erected that "calculations mean nothing." By his testimony, Mr. David seemingly rejects the concept that calculations justify an engineer's drawings and designs and that calculations are a critical component of engineering work.

18. Mr. David's opinions, which were advanced as reason to dismiss the entire Amended Accusation against respondent, are rejected. All of Mr. David's testimony, which seems to exonerate respondent by opining respondent's work to meet industry standards, is found to be without merit.

ii. MR. THOMAS BOWER

19. Respondent called to the hearing Mr. Thomas Bower to offer testimony regarding the standard of practice by engineers engaged in the SFDBI's staff review process. Mr. Bower worked as a staff engineer for SFDBI during 2006. But Mr. Bower, who holds only a civil engineer license, was not persuasive or credible when he opined that respondent's calculations and drawings met the requirements expected of the work product documents by a structural engineer when such documents are submitted to secure approval by SFDBI for issuance of requisite permits for the construction of a building project.

Mr. Bower was not believable when he noted that respondent's reply regarding seven items set out in the SFDBI plan review comments process was legally sufficient. And respondent was not persuasive with an argument that Mr. Bower established that complainant's industry expert's determinations regarding respondent's negligence and incompetence did not match the standard of actual practice in San Francisco with regard to the SFDBI. And respondent was not accurate that Mr. Bower satisfactorily demonstrated that respondent's work project fell within an exception in the Uniform Building Code in the area of "alterations of existing structural elements or additions to new structural elements."

Complainant showed that Mr. Bower was a probationary employee with the SFDBI when respondent interacted with him regarding the Comment Review Process. (Mr. Bower worked at SFDBI from January 2006 until September 2006.) And Mr.

Bower acknowledged at the hearing that his employment⁵ with SFDBI was terminated because his work as an engineer for that agency did not meet SFDBI's expectations regarding the performance of a staff engineer.

Matters that Indicate that Respondent Was Not Credible at the Hearing

20. At the hearing of this matter, respondent gave testimony over the span of five days between March 22, 2011 and September 21, 2011. Despite the length of time and extent of his experience as an engineer and a licensed building contractor in San Francisco, respondent's testimonial evidence at the hearing was not wholly reliable or fully accurate.

21. At the hearing of this matter, respondent was not credible when he asserted that the drawings sent to the SFDBI for issuance of permit approval were incomplete when submitted to that agency in approximately late March 2006.

22. Respondent was not persuasive when he testified that certain drawings and calculations were not properly signed or reflective of his engineer's stamp. Respondent's argument was not persuasive that because those documents, which lacked his signature and valid engineer's stamp, were defective and incomplete he was not subject to disciplinary action by the board.

23. Respondent was not believable when he claimed at the hearing that the proposed work pertaining to the project's seismic upgrade was of an "emergency" matter, which mitigated the extent of his blameworthiness for inexact calculations. Contrary to respondent's testimony, his work on the project's seismic upgrade consists of two sets of drawings. Complainant's Exhibit 5 constitutes the signed and stamped version of respondent's drawings that were submitted to SFDBI. And complainant's Exhibit 12 is the unsigned, unstamped version of the seismic upgrade that respondent informed the board's enforcement personnel was the "complete permit submittal." Not only does complainant's Exhibit 12 contain all of the pages found in Exhibit 5, but also Exhibit 12 contains several pages ("A" sheets and sheets S4-a and S4-b) that are not included in Exhibit 5, but which provide additional narratives, calculations and drawings made by respondent to vainly support his

⁵ Respondent attached to his written "Closing Trial Brief" (hearing exhibit "EEE"), the "Decision After Nonjury Trial" (Order) in the Superior Court for San Francisco Case No. CGC-06-459179. The Order made highly critical observations of Mr. Bower with regard to the controversy between respondent and homeowners. The Order set out, "[g]iven the sloppy practices of Bowers (sic) and possibly others in [SFDBI] . . . it is entirely believable that Bowers (sic) misplaced [respondent's] responses." (page 8). And the Order noted, "It is clear that internal issues within [SFDBI] concerning workload . . . and very possibly Bowers' (sic) own lack of competence were the reasons that the permits were not issued . . ." (page 10.)

arguments regarding the supposed professional, thorough and accurate nature of his work.

24. During the course of the investigation by the board's enforcement personnel, respondent engaged in inflammatory denunciations and ridicule of persons he viewed to be adversaries. His remarks, which were at times obscene, characterized various individuals as criminal, deviants, and fraudulent, unethical persons. He unpersuasively expressed that many persons were linked into a vast conspiracy against him. And further that the conspiracy was devised to cover up "murder," "break-ins" of his personal residence, attacks upon him by thugs who beat him and his associates, "gun running," "gutting of service dogs," and "child rape." Respondent's characterizations of the supposed heinous acts by others were not substantiated or corroborated by competent, relevant evidence. Hence, respondent's extraneous verbal and written comments and attacks regarding others must be viewed as wholly without merit.

Complainant's Expert

25. Tsuyoshi Bunden, P.E., S.E., (Mr. Bunden or industry expert) complainant's expert witness, appeared at the hearing to offer reliable and persuasive evidence. By his demeanor while testifying, his attitude towards the proceeding, his clear and unhesitating presentation of evidence as well as his solemn, sincere and conscientious attitude towards the proposed action against respondent, Mr. Bunden established himself to be a credible,⁶ persuasive and trustworthy witness at the hearing of this matter.

26. Mr. Bunden holds licenses as a structural engineer and a civil engineer. The State of California issued him a civil engineer's license in 1981 and a structural engineer's license in 1991. He has been licensed a structural engineer by the State of Arizona since November 2005. And in November 2008, the State of Florida issued him a license as "professional engineer."

In 1978, the University of California, Berkeley, awarded Mr. Bunden a Bachelor of Science degree in civil engineering. And in December 1981, he received a Master's degree from the University of Washington, Seattle, in Structural Engineering and Structural Mechanics.

Since 1993, Mr. Bunden has been the principal of his own company, called Narwhal Enterprises. The company engages in providing "full service structural engineering consulting" work.

⁶ Government Code section 11425.50, subdivision (b), third sentence.

The industry expert was shown to be proficient in several areas, including designing new buildings and structures, retrofitting existing buildings, plan checking, structural investigative engineering, seismic risk analysis and evaluations, designing equipment bracing, and peer review consulting.

27. Mr. Bunden wrote Board Enforcement Analyst Doering a technical report, dated May 16, 2007. Complainant's industry expert's report describes acts and omissions by respondent that indicate violations of standards of practice for a professional engineer with regard to respondent's preparation calculations and drawings relating to homeowners' project.

28. After an exhaustive, comprehensive review of all the documents, including respondent's drawings and calculations that were in the board's possession, Mr. Bunden issued the report, dated May 16, 2007. In the report, as dispatched to Enforcement Analyst Doering, the industry expert expressed:

In general, the work performed by [respondent] met the standards of practice for the type of project undertaken with some notable exceptions. [Respondent's] overall procedure and methodology for the design of the referenced project were generally sound but there were errors in the calculations and in the project drawings

At the hearing of this matter, the industry expert established that respondent's drawings and calculations, as described in Factual Findings 9 and 14 above, contain numerical errors, omissions or are grounded upon incorrect methodologies that are ordinarily used in engineering and design by persons licensed by the board.

29. During the course of the hearing in this matter, complainant's industry expert modified some of previous determinations regarding respondent's negligence and incompetence. Hence matters that appear in the Second Amended Accusation as causes for discipline that are not raised in this Decision pertain to matters either modified or withdrawn by the industry expert as grounds for adverse board action against respondent's license.

30. The industry expert found that respondent's drawings and calculations, pertaining to both the seismic upgrade and the garage extension, reflected errors. In Mr. Bunden's viewed certain calculations and drawings by respondent that reflected errors on respondent's part that not only demonstrated negligence,⁷ but also the calculations and drawings reflected respondent's incompetence.⁸

⁷ Negligence means the failure by the subject licensee in a work product that shows a lack of due care that violates or breaches standards of care ordinarily exercised in similar instances by a duly licensed structural engineer.

31. The industry expert's report along with the extensive testimony rendered by him at the hearing of this matter operate as a significant aspect to determine that the clear and convincing evidence sustains the allegations set out in complainant's accusation against respondent. The factual basis for imposition of discipline against respondent's license is set forth below.

Factual Basis for Imposition of Discipline against Respondent's Licenses

i. FIRST CAUSE FOR DISCIPLINE – NEGLIGENCE

32. Respondent's calculations for seismic upgrade as prepared on November 10, 2005, which consists of 62 pages, contain several errors. Such errors, which constitute negligence, include the following.

The calculations on page 31 of the drawings reflects a wall width of 11.25 inches as well as 11.5 inches. However, the corresponding drawings for the upgrade show the wall with 10 inches and 11.25 inches.

Also the concrete strengths are depicted with similar discrepancies. The calculations indicate the compressive strength for all concrete elements to be 2,500 pounds per square inch (psi), while the drawings show multiple concrete strengths of 2,500 psi to 4,000 psi.

Respondent was not believable that concrete strength rated at 2,500 psi is acceptable, because his drawings reflect stronger concrete strengths.

Complainant's expert was persuasive when he asserted that "consistency is important" as between drawings and calculations.

Respondent demonstrated negligence when his drawings and calculations were not consistent with regard to wall widths and concrete strengths.

33. Respondent was not believable when he asserted at the hearing that the discrepancies or inconsistencies in the drawings and calculations were purposefully made for the benefit of his client. Respondent unpersuasively claimed that the representation of a 10-inch wall was made to accommodate Kyle Webb, the architect hired by homeowners. Despite calling architect Webb an "illegal architect," respondent offered no satisfactory explanation for designating a wall's width inexactly in order to please his clients and the architect. And respondent was not

⁸ Incompetence means an engineer's work product that demonstrates the absence of requisite knowledge, training or experience of a licensee to adequately perform tasks or functions expected of licensed professional engineers.

credible when he claimed at the hearing that he depicted the concrete at 2,500 psi in order to save money for the homeowners because such concrete strength depiction would result in lesser special inspection costs. However, complainant's expert witness showed that special inspections would nevertheless occur with the nature of the project.

Also important to this matter was the industry expert's reasonable determination that respondent's use of 2,500 psi for the compressive strength of concrete violated the standards set out in the California Building⁹ Code. Respondent's rationale reflected negligence because, as shown by the industry expert, violation of the California Building Code and the standard of care, in order to save money for a client is not justification to use weaker concrete than required.

The inconsistencies and discrepancies in respondent's drawings and calculations for the seismic upgrade constituted negligence.

34. Respondent's calculations for the seismic upgrade omitted critical and important information. The calculations omit the angle of inclination for rock bolts. In addition, respondent failed to generate calculations to determine the appropriate embedment lengths for either the bond zone or the non-bond zone for rock bolts. Although respondent's calculations indicated in a note the methodology for the determination of the appropriate embedment lengths, he failed to actually use the methodology to justify the appropriate embedment lengths.

The omissions in respondent's calculations constituted negligence.

35. As to the matters set out in Factual Findings 32 through 34, respondent unpersuasively argued that he could not adequately address those deficiencies because a soils engineer failed to perform his professional responsibilities, duties or functions. And the soil engineer's failure to provide him with supportive data led to the omissions in the calculations. But in the opinion of complainant's expert, had such impediment by a soils engineer occurred, such occurrence does not excuse a professional engineer's omissions. In such an occurrence, respondent was obligated to conspicuously mark the calculations as "incomplete" insofar as the omission of the angle of inclination for rock bolts and the failure to justify embedment lengths.

36. The record in this matter demonstrates that after the Accusation in this matter was served upon respondent, he concocted a story that the calculations were incomplete and unsigned, and that another engineer, named Pat Buscovich, either presented the drawings and calculation without his consent, or that Mr. Buscovich forged respondent's signature and professional stamp. And respondent unbelievably claims that he had refused to sign the incomplete calculations. Yet during cross-

⁹ California Building Code, 2001, section 1921.2.4.1 sets out, in part, "Compressive strength . . . shall not be less than 3,000 psi."

examination, respondent finally admitted that he had signed the calculations, which he earlier argued were incomplete.

37. Another error in the calculations for the seismic upgrade involved the formula for uplift force (PUP), which was incorrectly set out by respondent. The proper PUP was persuasively explained by complainant's industry expert. Despite respondent's presentation during the course of direct examination to show the actual calculation in determining the values for uplift force, respondent's calculations that were presented for permit approval with the SFDBI were incorrect. Respondent's act of filing incorrect calculations for uplift forces constituted, therefore, negligence.

ii. SECOND CAUSE FOR DISCIPLINE - INCOMPETENCE

38. Respondent's calculations for seismic upgrade prepared on November 10, 2005, which consists of 62-pages, contain several errors. Such errors, which constitute incompetence in the practice of professional engineering, include the following.

39. Cross sections of the project, which are depicted on pages 29 and 46 of the calculations, may be interpreted by a reasonable, independent building professional to indicate that one complete floor level is missing. The building over the garage extension is shown as both a three-story structure and a four-story building. Hence an interpretation of the number of floor depends on the cross section page that might be chosen for study. In reality, most of the building over the garage extension exists as four stories. But on critical pages for the calculations, respondent used a cross section that depicts only three floors. That aspect of the building represents only a portion of the area that required engineering calculations. Respondent's calculation regarding the cross section missed, or excluded, the vast region of the building over the garage.

40. Additionally, the calculation selected by respondent with regard to engineering for the seismic upgrade reflected his selection of a cross section that did not reflect the structure's area over a retaining wall. As the industry expert noted the retaining wall should have been the focal point of the seismic upgrade. Respondent chose a cross section for the calculations that was not over the critical retaining wall. The building's area over the retaining wall consists of four stories, but the cross section used by respondent for his calculations depicts three stories. Accordingly, respondent's omission of a complete floor level in calculations strongly suggests his lack of ability and knowledge in discharging the obligations, functions and responsibilities of a professional engineer so as to constitute incompetence.

41. Also, Respondent demonstrated incompetence in his failure to design a critical concrete wall on page 36 of the calculations. He did not produce calculations that justify the design of the retaining wall. Although respondent's calculations and drawings indicate the element of the seismic upgrade, that is a retaining wall, that was

to be constructed, respondent's work product as sent to the SFBDI failed to demonstrate that the design was safe and cost effective. Such demonstration, as opined by the industry expert, is the purpose of engineering the retaining wall. Notwithstanding respondent's hearing testimony, which supplemented his written argument to the board's enforcement unit at page 37 of the 175 writing, that the designed retaining wall was "100 times stronger" than the wall was required to be, respondent did not set forth calculations to confirm his estimation. Respondent failed to justify the design. His failure demonstrates respondent's lack of knowledge and ability in discharging the professional obligation, functions and duties of a professional engineer.

42. Of importance is respondent's claim regarding the proposed retaining wall's strength being much stronger than required by the industry standards. Such claim represents incompetence in that the calculations, if correct, would reflect "over engineering" the wall. Hence, that enhanced strength would result in increased labor and material costs in a manner as to unjustly enrich the general contractor who respondent believed would be him at the time when the calculations were submitted between November 2005 and January 2006.

43. Hence, based on the immediate foregoing, respondent's errors constitute incompetence.

iii. THIRD CAUSE FOR DISCIPLINE – NEGLIGENCE

44. Respondent's calculations for the garage extension under the rear portion of the building constituting the project and prepared on November 10, 2005, which consists of 39 pages, contain several errors, which constitute negligence. Three out of the four instances of respondent's negligence as set out in the controlling accusation were proven at the hearing of this matter. Such errors, which constitute negligence, include the following.

45. On page 33 of the calculations for the garage extension, respondent set out a lateral soil pressure diagram. But the calculation for the design of the rear wall was inconsistent with the pressure diagram as set out on page 36 of the calculations that pertained to the seismic upgrade. Each page shows a 30-foot wall; however, the soil pressure diagram (page 30 of the calculations) does not include the top six feet of the wall. Hence, the design values on page 33 were incorrect. (Even respondent's expert - Mr. David - agreed that the wall's depiction was to be at a 30-foot height.) At page 33 the wall's calculations are grounded upon a 24-foot wall. Accordingly, respondent was negligent in designing a 24-foot wall when the wall was to be 30 feet.

46. Respondent was not persuasive when he asserted at the hearing that his calculation in the design process showed a 24-foot and did not include the wall's top 24 feet because that element of the structure did not endure any forces upon it. He unbelievably proclaimed that there was any empty space behind the top six feet of the

wall “by law.” But, respondent’s testimony is directly contradicted by his drawings and calculations. And respondent’s testimony on this point delved into an explanation that the toxic waste accumulation in the building affected the calculations for the wall. (Toxic waste in the structure would have exerted a lateral force, as explained by the industry expert. And such lateral force should have been included in the pressure diagram on page 33 of the subject calculations.) Respondent’s drawings and calculations show the existence of a concrete foundation abutting the top six feet of the wall, which is shown on page 36 for the seismic calculations. The concrete foundation and other permanent material such as toxic waste were required to be factored into the pressure diagram on page 33 of the calculations for the garage extension. Hence, respondent was negligent in failing to account for the top six feet of the thirty-foot wall.

47. Also respondent’s negligence was shown by his failure to specify the angle of inclination of the rock anchor as set out on page 36 of the calculations for the garage extensions. And respondent did not generate any calculations to determine the appropriate embedment lengths for both the bond zone and non-bond zone. In these respects, respondent failed to provide engineering analysis and justification for the final design.

48. Hence, respondent was negligent in the foregoing matters set out in Factual Findings 44 through 47.

iv. FOURTH CAUSE FOR DISCIPLINE – INCOMPETENCE

49. Respondent’s calculations for the garage extension as prepared on November 10, 2005, which consists of 39 pages, contain several errors. Such errors, which constitute incompetence in the practice of professional engineering, include the following.

50. The subject calculations are grounded on a building cross section depiction on page 21 of the subject document that is missing inclusion of an entire floor level. The missing floor level’s design loads, which must be generated, were omitted in respondent’s calculations. And respondent’s errors in the calculations and drawings for the proposed seismic upgrade are transposed, or carried, into the calculations for the garage extension.

51. Hence, based on the immediate foregoing Factual Findings 49 and 50, respondent’s errors constitute incompetence.

v. FIFTH CAUSE FOR DISCIPLINE – NEGLIGENCE

52. Respondent’s calculations for the 13-page response to the SFDDBI’s plan check comment pertaining to the seismic upgrade, as prepared on July 24, 2006,

contain several errors. Such errors, which constitute negligence, include the following.

53. In his responses to the plan check comment inquiry, on page 10 of the subject calculations, respondent omitted the live load with respect to the calculation of factored load for the existing footing that spans six feet. There is live load associated with the floor load to the subject portion of the slab and the wood framed floor that is attached to the deep beam footing. Although the live load does not add significantly to the overall total load, the calculations for this matter should have been included in the calculations.

54. Respondent was not persuasive at the hearing when he asserted that even though he was aware of the live load factor he omitted the live load calculations in order to be "conservative." The opinion of the industry expert was much more compelling on this matter than respondent or Mr. David.

55. Accordingly, respondent's omission constituted negligence in filing calculations in response to plan check inquiries regarding the seismic upgrade.

VI. SIXTH CAUSE FOR DISCIPLINE – NEGLIGENCE

56. Respondent's set of drawings is titled, "Structural Rehabilitation with New Seismic Upgrade/ UMB Wall Removal" for the project. The drawings, which were numbered R-1 to R-3 and S1-S13, were prepared on October 22, 2005. The set of drawings contain errors, which constitute Respondent's negligence is shown by the following. (The evidence in the record includes two versions of the set of drawings here under consideration. This cause of discipline is based upon the signed and stamped set of drawings marked as complainant's Exhibit 5. At the hearing of this matter, respondent asserted that Exhibit 5 consisted of complete drawings for an "emergency" seismic upgrade; and he demonstrated his endorsement of the drawings by re-signing the exhibit during the proceedings.)

57. Respondent showed an assortment of concrete strengths in the drawings, but a single concrete strength occurred in the corresponding calculations for the seismic upgrade. One sheet S1 (General Notes) for the drawings, respondent set out a concrete strength of 2,500 psi for the footings and slabs on grade, yet 3,000 psi for "all other concrete" and 4,000 psi for columns and waffle slabs. In the calculations pertaining to the proposed project the concrete strength was set at 2,500 psi for all concrete elements for the work. The calculations do not reflect concrete elements having strengths of 3,000 psi or 4,000 psi. In that the drawings had inconsistent concrete strengths depicted, respondent demonstrated negligence.

58. Respondent's drawings reflected two values for the retaining wall thickness in Detail C of Sheet 6 that pertained to the seismic upgrade. One value was shown at 10 inches and another value was noted as 11.25 inches. Respondent's

explanation at the hearing was not believable that he set out the two values in order to accommodate the architect who was hired by homeowners. But respondent drawings ran the risk that a contractor, who was not guided day-by-day through his office, might chose the incorrect value for the wall's width, and, thus erect a dangerous wall. (There were no calculations to justify a 10-inch wall because all the calculations were based on 11.25-inch and 11.50-inch thick walls. As shown by the industry expert it may be inferred that a 10-inch wall will be safe because no calculation confirmed safety at that wall thickness.)

Respondent was negligent in setting forth two values for thickness of the retaining walls in the drawings.

59. Respondent's drawings do not depict the angle of inclination for steel anchor and rock bolts as shown in Detail B and Detail C on sheet 7. Respondent was not credible when he claimed at the hearing that he could not depict the angle of inclination without the report of Allen Gruen, the soils engineer. Respondent, however, testified that the drawings were complete and should have gained SFDBI approval to obtain building permits. And respondent demonstrated his assent to the accuracy of the drawings by signing the drawings during the proceeding.

Respondent was negligent with his failure to specify the angle of inclination in the drawings.

60. The details for the end anchorage bearing against the concrete wall are missing in that respondent failed to design the details. The drawings lacked calculations to justify the design. And there was no calculation that represented the ability of the concrete to withstand the pressures that the anchor bearing would exert on the concrete.

Respondent was negligent in his failure to justify a design in the way of showing the anchorage bearing and concrete that supports the bearing as being safe.

vii. SEVENTH CAUSE FOR DISCIPLINE-INCOMPETENCE

61. Respondent's drawings for the seismic upgrade, prepared on October 22, 2005, contain several errors. Such errors, which constitute incompetence in the practice of professional engineering, include the following.

The cross section of the building as depicted in Detail A on sheet S5 is missing one complete floor level. Respondent's drawing showed an incorrect cross section for the building.

62. Respondent's drawing, which lacked an entire floor level, constituted incompetence.

63. Respondent's other set of drawings are titled, "Structural Rehabilitation with New Seismic Upgrade/ UMB Wall Removal" for the project. These drawings were numbered A1 to A9, S1 to S4, S4-A, S4-B, S5 to S13, and R1-R3, were prepared on October 22, 2005. The set of drawings contain errors, which constitute Respondent's negligence as shown by the following.

This set of drawings, which was marked for the hearing as Exhibit 12, were more extensive than Exhibit 5. Although respondent neither signed or affixed a stamp, respondent informed the board's enforcement personnel that the drawings were part of a "complete permit submittal."

64. Further to the errors established by evidence regarding the Accusation's Sixth Cause for Discipline, respondent's drawings showed other errors in Sheet "A." On Sheet A-4, respondent specified the elevator as "New National Wheelvator 'Epic' Residential Elevator," but sheets A5 through A9 show multiple models of the Concord Infinity Residential Elevator. Hence the drawings depict two different manufacturers' brands for a single elevator shaft. Moreover, Sheet A7 and A8 do not specify the model type or size of the Concord Infinity elevator that respondent contemplated for installation. And the pages show four model types of the Concord Infinity elevators, namely model type 1L, model type 2, model type 3 and model type 5. The record shows that there are several sizes for each model type.

65. Respondent was negligent by his failure to specify the model type and size that was to be installed for use in the designed elevator shaft.

66. Respondent's drawings provide no structural calculations or design notations to generate a determination of strengths of the wall studs, framing and structural system to support the elevator loads for the proposed new elevator. Respondent was not persuasive that the structural calculations may be inferred from the drawings; however, the industry expert showed that respondent's assertions on this matter are erroneous. Respondent's drawings include only generic specifications for the Concord model elevator and those specifications were made by the manufacturer, that is Concord Infinity Elevator Company. Respondent's drawings reflect nothing to establish that the project site's structure could support a new elevator, regardless of the manufacturer and model selected. Rather respondent's drawings as set out at page A5 indicate that certain work on the elevator system's installation would be executed by "others."¹⁰

¹⁰ At page A5 (lower right hand corner), section 2.1.7 sets out that others will "provide adequate support for guide rail fastening." Respondent did not provide any justifications to demonstrate that there was to be adequate support for guide rail fastening.

67. Respondent was negligent in his failure to prepare engineering drawings that include adequate calculations. Respondent did not demonstrate through his drawings that the project site could withstand the loads of a newly installed elevator system.

68. In his evidence in mitigation, respondent contends that the drawings on this aspect of the project were incomplete. His evidence on this matter was not persuasive. And had the drawings been incomplete respondent was required by the standards expected of a professional engineer to mark the drawings as being incomplete. Also if the drawings were incomplete, respondent should not have sent the drawings to homeowners' agents, attorney Harding and permit expeditor Pat Buscovich, who acted on the drawings as being part of a "complete permit submittal" to the SFDBI.

69. The matters in Factual Findings 55 to 59 prove the allegations in the controlling Accusation's Eighth Cause for Discipline, paragraph 25, subparts (b), (d) and (e). The afore-referenced factual findings that support concluding negligence are grounded on the same drawings underpinning this cause for discipline although the Sixth Cause for Discipline pertains to a different version of the drawings.

70. Hence, respondent was negligent with regard to the seismic upgrade as shown in the drawings numbered A1 to A9, S1 to S4, S4-A, S4-B, S5 to S13, and R1-R3, which come within complainant's Exhibit 12.

xi. NINTH CAUSE FOR DISCIPLINE-INCOMPETENCE

71. Respondent's drawings for the seismic upgrade, prepared on October 22, 2005, and marked as A1 to A9, S1 to S4, S4-A, S4-B, S5 to S13, and R1-R3 contain several errors. Such errors, which constitute incompetence in the practice of professional engineering, include the following.

72. Factual Findings 62 to 70 are applicable to this cause for discipline, in that both causes for discipline are based upon different versions of the same set of drawings that pertain to structural rehabilitation with new seismic upgrade/UMB wall removal at the project.

73. Respondent's omission of an entire floor level establishes incompetence.

x. TENTH CAUSE FOR DISCIPLINE – NEGLIGENCE

74. Respondent's drawings that pertained to an existing garage extension under the rear of the building at the project site that were prepared in October and November 2005 contain several errors. Such errors, which constitute negligence in

the practice of professional engineering, include the following.

75. On Sheets A5 to A9, the specific type of Concord Infinity Residential Elevator to be installed at the project site was not "called out" in the drawings. Also the drawings showed neither calculations on the drawings of a structural nature nor design specifications whereby determinations can be ascertained to establish that the wall studs, framing and the structural system are adequate, or suitable for strengthening, so as to support loads for the new elevator system.

76. On Sheet S1 (that is, the General Notes page), respondent made notes on the drawings for the garage extension that contain concrete strengths that do not correspond to the calculations. Respondent's calculations show a single concrete strength for all concrete elements, namely 2,500 psi. But Sheet S1 of respondent's drawings reflect three concrete strengths of 2,500 psi, 3,000 psi and 4,000 psi. And Sheet S2 of the drawings set forth additional concrete strengths including a representation for one as weak as 2,000 psi. Not only is there internal inconsistency between the drawings and calculations, but also there is an inconsistency for the concrete strengths between drawings on sheet S1 and S2. And the drawings reflect concrete strengths that are weaker than the calculations justified. In particular, respondent set forth no calculations that justify the 2,000 psi concrete strength as depicted in the drawings.

77. Hence, respondent was negligent with regard to the seismic upgrade as shown in the drawings numbered A5, S1, S2, which come within complainant's Exhibit 13.

78. On sheet S2, the concrete specified under respondent's "Concrete Quality" table does not correspond to the values used in the calculations. As the industry expert persuasively opined based on the calculations, all concrete strengths on respondent's drawings showed have been expressed as " $f_c = 2,500$ psi."

79. On sheet S5, respondent's drawings for the garage extension failed to depict the angle of inclination of the steel anchor and rock bolt shown on sheet S5 as well as details B and C.

And respondent's drawing did not show that there had been the design for the details of the end anchorage bearing against the concrete wall. Such details were missing.

xi. ELEVENTH CAUSE FOR DISCIPLINE – FAILURE TO OBTAIN SIGNED CONTRACT

80. Despite respondent's oral understanding with homeowners regarding his provision of services to the consumers as a professional engineer for the purpose of making calculations and preparing drawings and designs for work at the project

site, respondent failed to secure a written contract that was signed by homeowners.

81. Although respondent sent, by way of telefacsimile transmission, the draft written contract to the homeowners, he did not secure the signatures of the homeowners on the draft contract for the provision of services as a professional engineer. In fact, respondent never obtained a signed engineering contract from the homeowners.

82. Respondent was not persuasive that the project constituted an emergency that required immediate action so that a written contract was an extraneous exercise. The acts of the parties at the time that respondent began the formulation of calculations and creating drawings do not suggest that the project pertained to an emergency that involved a risk to life. In no communication did respondent inform the SFDBI or any other public official that the project in its unimproved condition posed a threat to life. When respondent began his work and for the time that he actually performed construction services at the project, the building that made up the project housed tenants, including homeowners' adult daughter. Respondent never alerted a building department official regarding the need to "red tag" the project site before corrective construction measures were completed.

83. Respondent's failure to secure a signed contract from the homeowners constituted a violation of the law.

xii. TWELFTH CAUSE FOR DISCIPLINE – FAILURE TO LAWFULLY MARK THE DRAWINGS AND CALCULATIONS

84. At the hearing of this matter, respondent repeatedly advanced a contention that several drawings and calculations for both the seismic upgrades as well as the extension for a garage at the project were incomplete or interim when the subject documents were presented to the SFDBI. Even though all the documents in question (structural calculations for structural rehabilitation with new seismic upgrade/UMB wall removal at the project; structural calculations for existing garage extension under rear of existing building comprising the project; calculations for Plan Check Comment Response filed with the SFDBI; and drawings A1 to A9, S1 to S11 for the existing garage extension under the rear of the existing building for the project), were affixed with respondent's professional engineer stamp, respondent failed to mark the documents as either "preliminary," "not for construction," "for plan check only," or "for review only," or some other similar notation indicating that the drawings and calculations were not complete.

85. Even if respondent's claim regarding the subject documents were true, his omission of appropriate notations that the material was "preliminary" or incomplete constituted a violation of law, and in particular Business and Professions Code sections 6775, subdivision (h), and 6735.

Matters in Mitigation

86. Respondent is a graduate of University of California, Berkeley, School of Engineering. He has both a Bachelor of Science degree in Civil Engineering and a Master of Science degree in Structural Engineering/Structural Mechanics. He earned the bachelor of science degree in 1983.

87. Respondent has been a civil engineer licensee of the board since 1985. He acquired from the board in 1988 a license as a structural engineer.

The Contractors' State License Board has issued respondent three building contractor licenses, namely an engineering construction (A) contractor's license, a general building (classification B) contractor's license, and a reinforcing in steel (C-50) contractor's licensee.

Respondent conducts all business endeavors as both a board licensee and in the various contractor capacities under a fictitious business entitled called Quake Structural Engineering, which is a sole proprietorship. (Although licensing agencies may find an irregularity with the use of an unregistered business name, respondent's practice at times has involved the use of another fictitious business name, namely "QSE Construction.")

88 Respondent is a fifth-generation practitioner of the engineering profession. His father, who also was a graduate of the UC Berkeley School of Engineering, worked for many years as an engineer for Bethlehem Steel. Respondent's grandfather was an engineer in the 1920's and he was part of the first group of persons to be issued an engineer's license by the State of California.

89. Complainant offered no record of disciplinary action against respondent due to past acts or omissions on his part.

90. Respondent proclaimed that the drawings and calculations were delivered to homeowners' attorney, Elva Harding, with his intention that the documents would serve as "benchmarks" in a process to render the proposed project safe. Respondent poignantly proclaimed that homeowners resisted respondent's recommendations regarding the unsafe nature of the structure and that the owners rejected respondent's proposal to vacate tenants from the building. (Complainant called no witness, namely either homeowners or their agents, to refute respondent's testimony on this matter.)

91. Respondent offered persuasive testimonial evidence that homeowners' lawyer retained her acquaintance, Pat Buscovich, to act as the structural engineer who would secure SFDBI permit approval. Records of SFDBI showed Mr. Buscovich as a structural engineer who was associated with the project from March 26, 2006 until the summer of 2006 when homeowners terminated the contracts. Mr. Buscovich never

communicated any concern or opposition to respondent's calculations and drawings either before or after the time when Mr. Buscovich took the documents to SFDBI.

92. Respondent offered compelling testimonial evidence that the structure, which constituted the project, contained many dangerous and unsafe facets that were challenging and that the homeowners' representatives interfered with his efforts to take full control of the project in order to make the project safe.

93. Respondent demonstrated that he possesses substantial knowledge of structural engineering concepts, terms and processes. He displayed great fluency with engineering and other building trade topics and subjects.

94. Respondent persuasively proclaimed at the hearing of this matter that as a structural engineer he is uncompromising in his commitment to "life safety" issues associated with his work. Complainant offered no evidence that respondent ever displayed such neglect as a professional engineer as to pose a risk to the health, safety or welfare of consumers.

Matters that Suggest a Lack of Rehabilitation Evidence

95. From the outset of the investigation by the board's Enforcement Division's personnel, respondent has displayed extreme hostility and caustic disdain towards many individuals, including the board's personnel, the industry expert and the complainant's legal counsel in the person of the trial deputy attorney general. Respondent accused various individuals of committing heinous acts that go well beyond the realm of professional engineering and related building trade disciplines. He has shown great resistance to the professional opinion of others and has proclaimed that he cannot be told "how to make [his] jobs safe." Respondent has indicated a lack of understanding of the board's legal obligation to ensure that professional engineers conduct all aspects of their professional duties, functions and responsibilities in a safe manner.

Of great importance is that through the course of the many days of the subject administrative adjudication proceeding respondent could not acknowledge that he made any mistake in his provision of engineering services to homeowners. At most, he represented that following the dissolution of the relationship with the homeowners, the superior court lawsuit that followed the dispute and the board's investigation of his work that he fostered "tunnel vision" that related to his rage and emotional upset in this matter.

96. Respondent provided no evidence that suggests that he has taken steps to avoid the negligence, incompetence and unprofessional conduct proven by Complainant's comprehensive investigation and prosecution. Rather, throughout the proceeding, respondent sought to minimize the extent of his unprofessional conduct and to make excuses for the misconduct established at the hearing of this matter.

97. Other than the praise shown respondent by his industry expert, Mr. David, at the hearing of this matter respondent offered no declaration, letter or live testimony from former clients, other professional engineers, building contractors or other persons engaged in the design or construction industry to support respondent's competence, experience or reputation.

Complainant's Request for Recovery of Costs of Investigation and Prosecution and Respondent's Objection to Imposition of Costs

98. Complainant requests that respondent be ordered to pay the board the costs of prosecution under Business and Professions Code section 125.3. In support of the request for cost recovery, complainant offers a declaration, dated December 2, 2010, by Nancy A. Eissler, Enforcement Program Manager of the board, as well as the declaration, dated December 3, 2010, by Justin R. Surber, Deputy Attorney General. The declarations state that the board has incurred the following costs in connection with the investigation and enforcement of complainant's accusation as follows:

California Department of Justice, Office of Attorney General	
Fiscal Years 2009 and 2010	\$25,992.50
Complainant's Technical Expert's Statement of Services and Costs	
Investigative Costs.....	<u>\$3,796.05</u>
Total Costs of Investigation and Prosecution	\$29,788.55

99. The declarations by Enforcement Program Manager Eissler and Deputy Attorney General Surber fairly present such information by which the reasonableness of the costs may be determined and weighed for complainant's recovery for the investigation and prosecution activities before December 6, 2010. The declarations and their attachments set forth general, yet clear, descriptions of the tasks performed, the time spent in attending to such tasks, and the methods of tabulating the hours involved in calculating the costs, as required by California Code of Regulations, title 1, section 1042.

The comprehensive nature of the declarations and supporting documents for the certifications of costs establish that the board is entitled to a substantial measure of its costs of investigation and enforcement. The time expended by personnel of the Department of Justice was well within reason and was justified and necessary to establish the extent of respondent's negligence, incompetence, and unprofessional conduct. The facts developed at the hearing indicate that the deputy attorney general devoted a reasonable amount of time, which is found to have been of a prudent nature, to the prosecution of this matter.

100. Notwithstanding the immediate above factual finding, respondent advanced a meritorious defense in the exercise of his right to a hearing in this matter insofar as to justify reduction of the total amount of the costs sought for recovery. Respondent did show that some components and allegations raised in the accusation were not prosecuted and established by clear and convincing evidence. But, respondent cannot be seen, under the facts set out above, to have committed slight or inconsequential misconduct in the context of the accusation. And, respondent did not raise a "colorable challenge" to the accusation's paramount causes for discipline, namely respondent's unprofessional conduct, as manifested by negligence, incompetence and failure to secure a signed contract with homeowners.

At the hearing, respondent did offer evidence that he is the parent of a child afflicted with a significant developmental disability that confines his daughter to a wheelchair. And, he has been financially impacted by actions by a county's Child Support Services Agency that has taken measures to seize money from his bank accounts for child support obligations.

The immediate foregoing factors do indicate that the imposition upon respondent of the full costs of investigation and prosecution will unfairly penalize respondent. A substantial basis does exist to warrant a reduction of the assessment against respondent for the costs of prosecution incurred by complainant.

101. Respondent did provide adequate, competent evidence that complainant's certification of costs of investigation and prosecution is unreasonable in a total amount of \$29,788.55. Accordingly, as of the date of the hearing, the reasonable amount of costs owed by respondent to the Department of Consumer Affairs, on behalf of the board, is reduced by approximately one-third. The reasonable costs that may be recovered from respondent is set at a total amount of \$20,000.

LEGAL CONCLUSIONS

The Standard of Proof

1. The standard of proof in an administrative disciplinary action that seeks the suspension or revocation of a professional's license is "clear and convincing evidence to a reasonable certainty." (*Ettinger v. Board of Medical Quality Assurance* (1982) 135 Cal.App.3d 583.)

"Clear and convincing evidence" means evidence of such convincing force that it demonstrates, in contrast to the opposing evidence, a high probability of the truth of the facts for which it is offered. "Clear and convincing evidence" is a higher standard of proof than proof by "a preponderance of the evidence." (CACI15 201)

“Clear and convincing evidence” requires a finding of high probability for the propositions advanced in an accusation against a targeted respondent licensee. It must be so clear as to leave no substantial doubt and to command the unhesitating assent of every reasonable mind. (*In re Michael G.* (1998) 63 Cal.App.4th 700.) And, the standard of proof known as clear and convincing evidence is required where particularly important individual interests or rights are at stake. (*Weiner v. Fleischman* (1991) 54 Cal.3d 476.

Complainant established by clear and convincing evidence the foregoing factual findings and the legal conclusions below upon which disciplinary action is imposed upon the respondent herein.

Causes for Discipline

2. Business and Professions Code section 6775, subdivision (c), provides that the Board for Professional Engineers and Land Surveyors may reprove, suspend for a period not to exceed two years, or revoke the registration of any professional engineer “who has been found guilty by the board of negligence or incompetence in his or her practice. . . .”

INCOMPETENCE

3. California Code of Regulations, title 16, section 404, subdivision (n), defines “incompetence” as:

For the sole purpose of investigating complaints and making findings thereon under Sections 6775 and 8780 of the Code, ‘incompetence’ as used in Sections 6775 and 8780 of the Code is defined as the lack of knowledge or ability in discharging professional obligations as a professional engineer or land surveyor.

4. With regard to respondent’s incompetence, cause exists for discipline under Business and Professions Code section 6775, subdivision (c), as that statutory provision interacts with California Code of Regulations, title 16, section 404, subdivision (n), by reason of the matter set out in Factual Findings 38 through 43, 49 through 51, 61, 62, and 71 through 73.

NEGLIGENCE

5. California Code of Regulations, title 16, section 404, subdivision (w), defines “negligence” as

For the sole purpose of investigating complaints and making findings thereon under Sections 6775 and 8780 of the Code, ‘negligence’ as used in Sections 6775 and 8780 of the Code is defined as the failure of a licensee, in the practice of professional engineering or land surveying, to use the care ordinarily exercised in like cases by duly licensed professional engineers and land surveyors in good standing.

6. With regard to respondent’s negligence, cause exists for discipline under Business and Professions Code section 6775, subdivision (c), as that statutory provision interacts with California Code of Regulations, title 16, section 404, subdivision (w), by reason of the matter set out in Factual Findings 32 through 37, 44 through 48, 52 through 60, 63 through 70, and 74 through 79.

FAILURE TO OBTAIN SIGNED CONTRACT

7. Business and Professions Code section 6775, subdivision (h), provides that the Board for Professional Engineers and Land Surveyors may reprove, suspend for a period not to exceed two years, or revoke a certificate of any professional engineer “who violates any provision of [the Professional Engineers Act].”¹¹

8. Business and Professions Code section 6749 sets forth, in pertinent part:

(a) A professional engineer shall use a written contract when contracting to provide professional engineering services to a client pursuant to this chapter. The written contract shall be executed by the professional engineer and the client, or his or her representative, prior to the professional engineer commencing work, unless the client knowingly states in writing that work may be commenced before the contract is executed

¹¹ Chapter 7, Business and Professions Code, section 6700 et seq.

(b) This section shall not apply to any of the following:

[¶] . . . [¶]

(3) If the client knowingly states in writing after full disclosure of this section that a contract which complies with the requirements of this section is not required.

9. Cause exists for discipline under Code section 6775, subdivision (h), as that statutory provision interacts with Code section 6749, by reason of the matters set out in Factual Findings 7, and 80 through 83.

FAILURE TO APPROPRIATELY MARK THE DRAWINGS AND CALCULATIONS

10. Business and Professions Code section 6735, subdivision (a), states, in part:

All civil (including structural and geotechnical) engineering plans, calculations, specifications, and reports (hereinafter referred to as 'documents') shall be prepared by, or under the responsible charge of, a licensed civil engineer and shall include his or her name and license number. *Interim documents shall include a notation as to the intended purpose of the document, such as 'preliminary,' 'not for construction,' 'for plan check only,' or 'for review only.'* All civil engineering plans and specifications that are permitted or that are to be released for construction shall bear the signature and seal or stamp of the licensee and the date of signing and sealing or stamping. All final civil engineering calculations and reports shall bear the signature and seal or stamp of the licensee, and the date of signing and sealing or stamping. If civil engineering plans are required to be signed and sealed or stamped and have multiple sheets, the signature, seal or stamp, and date of signing and sealing or stamping shall appear on each sheet of the plans. If civil engineering specifications, calculations, and reports are required to be signed and sealed or stamped and have multiple pages, the signature, seal or stamp, and date of signing and sealing or stamping shall appear at a minimum on the title sheet, cover sheet, or signature sheet.

(Emphasis added.)

11. Cause exists for discipline under Code section 6775, subdivision (h), as that statutory provision interacts with Code section 6735, by reason of the matters set in Factual Findings 84 and 85.

12. Matters in mitigation as set out in Factual Findings 86 through 94 were considered in making the Order below.

Costs of Investigation and Prosecution

13. Business and Professions Code section 125.3 prescribes that a "licentiate found to have committed a violation or violations of the licensing act" may be directed to pay a sum not to exceed the reasonable costs of the investigation and enforcement of the case.

California Code of Regulations, title 16, section 419 provides, in pertinent part: "In addition to the disciplinary orders . . . all decisions shall address recovery of the board's investigative and enforcement costs, as described in and authorized by Business and Professions Code section 125.3."

California Code of Regulations, title 1, section 1042, subdivision (2), sets forth "a certificate or affidavit in support of costs incurred by the agency for services provided by regular agency employees should include sufficient information by which the ALJ can determine the costs incurred in connection with the matter and the reasonableness of such costs, for example, a general description of tasks performed, the time spent on such tasks, and the method of calculation the cost for such services."

Respondent's motion to strike complainant's petition for an award of costs is denied.

The California Supreme Court's reasoning as to the obligation of a licensing agency to fairly and conscientiously impose costs in administrative adjudication as articulated in *Zuckerman v. State Board of Chiropractic Examiners* (2002) 29 Cal.4th 32, 45-46, is persuasive and should be considered in this matter. Scrutiny of certain factors, which pertain to the board's exercise of discretion to analyze or examine factors that might mitigate or reduce costs of prosecution upon a licensee found to have engaged in unprofessional conduct, are set forth in Factual Finding 100.

By reason of Factual Findings 99 and 101, the reasonable costs of investigation and prosecution is set at \$20,000.

ORDER

Civil Engineer License No. C39743 and Structural Engineer License No. S3160 issued to respondent Thomas Henry Lutge are revoked, by reason of Legal Conclusions 4, 6, 9 and 11. Provided, however, that the revocation of licensure shall be stayed for five (5) years, during which time respondent's licenses shall be placed on probation subject to the following terms and conditions:

1. Respondent shall obey all federal, state, and local laws. He will fully comply with state law governing the practice of professional engineering and professional land surveying in California.
2. From the effective date of the decision, respondent shall submit and cause to be submitted special reports as required by board.
3. Within 45 days of the effective date of the decision, respondent shall provide the board with evidence that he has provided all persons or entities with whom he has a contractual or employment relationship in the area of professional engineering with a copy of the decision and order of the board. Within 30 days of the effective date of the decision, respondent shall provide the board with the name and business address of each person or entity required to be so notified. During the period of probation, respondent may be required to provide the same notification of each new person or entity with whom he has a contractual or employment relationship provided that the relationship is in the area of practice of professional engineering and/or land surveying in which the violation occurred and he shall report to the board the name and address of each person or entity so notified.
4. During the period of probation, respondent may practice professional engineering only under the supervision of a professional engineer licensed in the same branch as respondent. This person (or persons) shall be approved in advance by the board or its designee. Such supervising professional engineer shall initial every stamped document submitted by respondent.
5. Within 180 days of the effective date of the decision, respondent shall successfully complete and pass the California Laws and Board Rules examination, as administered by the board.
6. Within one year of the effective date of the decision, respondent shall successfully complete and pass the California special Civil Engineer's surveying examination.
7. Within two years of the effective date of the decision, respondent shall successfully complete and pass a course in professionalism and ethics, approved in advance by the board or its designee. Respondent shall provide the board with an

official transcript as proof of successful completion within 60 days of the completion date of the course.

8. Respondent shall successfully complete and pass, with a grade of "C" or better, a minimum of one and a maximum of three college-level courses, approved in advance by the board or its designee. Such courses shall be specifically related to the area of violation. For purposes of this subdivision, "college-level course" shall mean a course offered by a community college or a four-year university of three semester units or the equivalent; "college-level course" does not include seminars. The probationary condition shall include a time period in which the course(s) shall be successfully completed which time period shall be at least 365 days less than the time period ordered for the period of probation.

9. The period of probation shall not run during the time respondent is residing or practicing outside the jurisdiction of California. If, during probation, respondent moves out of the jurisdiction of California to reside or practice elsewhere, respondent is required to immediately notify the board in writing of the date of departure, and the date of return, if any.

10. Respondent is hereby ordered to reimburse the board the amount of \$20,000 within 90 days from the effective date of this decision for its investigative and prosecutorial costs up to the date of the hearing. Failure to reimburse the board's cost of its investigation and prosecution shall constitute a violation of the probationary order, unless the board or its Executive Officer agrees in writing to payment by an installment plan because of financial hardship. However, full payment must be received no later than two years prior to the scheduled termination of probation.

11. If respondent violates probation in any respect, the board, after giving respondent notice and the opportunity to be heard, may revoke his probation and reinstate the disciplinary order that was stayed. If an accusation or petition to revoke probation is filed against respondent, or if the matter has been submitted to the Office of the Attorney General for the filing of such, during probation the board shall have continuing jurisdiction until all matters are final, and the period of probation shall be extended until all matters are final.

12. Upon successful completion of probation, including the fulfillment of all conditions, respondent's engineering licenses will be unconditionally restored.

DATED: January 6, 2017

Original Signed

PERRY O. JOHNSON

Administrative Law Judge

Office of Administrative Hearings

1 EDMUND G. BROWN JR.
Attorney General of California
2 FRANK H. PACOE
Supervising Deputy Attorney General
3 JUSTIN R. SURBER
Deputy Attorney General
4 State Bar No. 226937
455 Golden Gate Avenue, Suite 11000
5 San Francisco, CA 94102-7004
Telephone: (415) 355-5437
6 Facsimile: (415) 703-5480
Attorneys for Complainant
7

8 **BEFORE THE**
BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS
9 **DEPARTMENT OF CONSUMER AFFAIRS**
STATE OF CALIFORNIA

10 In the Matter of the Accusation Against:

Case No. 859-A

11 **THOMAS HENRY LUTGE**
12 1632 Ulloa Street
San Francisco, California 94116

SECOND AMENDED ACCUSATION

13 **Civil Engineer License No. C 39743**
14 **Structural Engineer License No. S 3160**

15 Respondent.

16
17 Complainant alleges:

18 **PARTIES**

19 1. David E. Brown (Complainant) brings this Accusation solely in his official capacity
20 as the Executive Officer of the Board for Professional Engineers and Land Surveyors,
21 Department of Consumer Affairs.

22 2. On or about August 23, 1985, the Board for Professional Engineers and Land
23 Surveyors issued Civil Engineer License Number C 39743 to Thomas Henry Lutge (Respondent).
24 The Civil Engineer License was in full force and effect at all times relevant to the charges brought
25 herein and will expire on December 31, 2009, unless renewed.

26 3. On or about November 19, 1988, the Board for Professional Engineers and Land
27 Surveyors issued Structural Engineer License Number S 3160 to Thomas Henry Lutge
28

1 (Respondent). The Structural Engineer License was in full force and effect at all times relevant to
2 the charges brought herein and will expire on December 31, 2011, unless renewed.

3 JURISDICTION

4 4. This Accusation is brought before the Board for Professional Engineers and Land
5 Surveyors (Board), Department of Consumer Affairs, under the authority of the following laws.
6 All section references are to the Business and Professions Code unless otherwise indicated.

7 5. Section 6775 of the Code states, in pertinent part, that "[T]he board may reprove,
8 suspend for a period not to exceed two years, or revoke the certificate of any professional
9 engineer registered under this chapter:

10 . . .

11 (c) Who has been found guilty by the board of negligence or incompetence in his or her
12 practice.

13 . . .

14 (h) Who violates any provision of this chapter.

15 6. Section 6735 of the Code States:

16 "(a) All civil (including structural and geotechnical) engineering plans, calculations,
17 specifications, and reports (hereinafter referred to as "documents") shall be prepared by, or under
18 the responsible charge of, a licensed civil engineer and shall include his or her name and license
19 number. Interim documents shall include a notation as to the intended purpose of the document,
20 such as "preliminary," "not for construction," "for plan check only," or "for review only." All
21 civil engineering plans and specifications that are permitted or that are to be released for
22 construction shall bear the signature and seal or stamp of the licensee and the date of signing and
23 sealing or stamping. All final civil engineering calculations and reports shall bear the signature
24 and seal or stamp of the licensee, and the date of signing and sealing or stamping. If civil
25 engineering plans are required to be signed and sealed or stamped and have multiple sheets, the
26 signature, seal or stamp, and date of signing and sealing or stamping shall appear on each sheet of
27 the plans. If civil engineering specifications, calculations, and reports are required to be signed
28 and sealed or stamped and have multiple pages, the signature, seal or stamp, and date of signing

1 and sealing or stamping shall appear at a minimum on the title sheet, cover sheet, or signature
2 sheet.”

3 . . .”

4 7. Section 6749 of the Code States:

5 “(a) A professional engineer shall use a written contract when contracting to provide
6 professional engineering services to a client pursuant to this chapter. The written contract shall be
7 executed by the professional engineer and the client, or his or her representative, prior to the
8 professional engineer commencing work, unless the client knowingly states in writing that work
9 may be commenced before the contract is executed. . .”

10 COSTS

11 8. Section 125.3 of the Code provides, in pertinent part, that the Board may request the
12 administrative law judge to direct a licensee found to have committed a violation or violations of
13 the licensing act to pay a sum not to exceed the reasonable costs of the investigation and
14 enforcement of the case.

15 9. Section 419 of the Title 16, California Code of Regulations states in pertinent part:

16 “In addition to the disciplinary orders described in this section, all decisions shall address
17 recovery of the Board's investigation and enforcement costs, as described in and authorized by
18 Business and Professions Code section 125.3.”

19 FACTUAL BACKGROUND

20 10. Respondent entered into two with contracts Robert and Christina Adams. One
21 contract was for engineering work on the Adamses' property located at 359-361 Lombard St. San
22 Francisco. The other contract was for construction work on the same Adamses' property. The
23 contract for engineering services was not signed by the Adamses. This Accusation deals solely
24 with the engineering services provided by Respondent. Respondent prepared several sets of
25 calculations and drawings for the Adamses including those described in paragraphs 11-16.

26 11. Respondent prepared a set of calculations dated November 10, 2005, entitled
27 “STRUCTURAL CALCULATIONS FOR: STRUCTURAL REHABILITATION WITH NEW
28

1 SEISMIC UPGRADE/UMB WALL REMOVAL ADAMS RESIDENCE 359-361 LOMBARD
2 STREET SAN FRANCISCO, CA 94133.” This set of calculations was 62 pages long.

3 12. Respondent prepared a set on calculations dated November 10, 2005, entitled
4 “STRUCTURAL CALCULATIONS FOR: BLOCK: 78 LOT: 41 EXISTING GARAGE
5 EXTENSION UNDER REAR OF EXISTING BUILDING ADAMS RESIDENCE 359-661
6 LOMBARD STREET SAN FRANCISCO, CA 94133.” This set of calculations was 39 pages
7 long.

8 13. Respondent prepared a 13 page set of calculations dated July 24, 2006 (pages 8 and 9
9 were dated November 10, 2005), entitled “PLAN CHECK COMMENT RESPONSE FOR:
10 DEPARTMENT OF BUILDING INSPECTION.”

11 14. Respondent prepared drawings dated October 22, 2005, entitled “STRUCTURAL
12 REHABILITATION WITH NEW SEISMIC UPGRADE/UMB WALL REMOVAL ADAMS
13 RESIDENCE 359-361 LOMBARD STREET SAN FRANCISCO, CA 94133.” These Drawings
14 are numbered R-1 to R-3 and S1-S13.

15 15. Respondent prepared additional drawings dated October 22, 2005, entitled
16 “STRUCTURAL REHABILITATION WITH NEW SEISMIC UPGRADE/UMB WALL
17 REMOVAL ADAMS RESIDENCE 359-361 LOMBARD STREET SAN FRANCISCO, CA
18 94133.” These drawings are numbered A1 to A9, S1 to S4, S4-A, S4-B, S5 to S-13, and R1-R3.

19 16. Respondent prepared drawings dated November 2, 2005, November 10, 2005 and
20 October 22, 2005, entitled “EXISTING GARAGE EXTENSION UNDER REAR OF EXISTING
21 BUILDING ADAMS RESIDENCE 359-661 LOMBARD STREET SAN FRANCISCO, CA
22 94133.” These drawings are numbered A1 to A9, S1 to S11.

23 17. In general the drawings and calculations contain numerical errors, omissions, and
24 incorrect methodology used in design and engineering.

25 FIRST CAUSE FOR DISCIPLINE

26 (Negligence)

27 18. Respondent is subject to disciplinary action under section 6775(c) of the Code in that
28 Respondent was involved in negligence in the practice of professional engineering. The set of

calculations described in paragraph 11, above, contain errors that constitute negligence. The errors in the calculations that constitute negligence are as follows:

a. On page 32: The design of the wall stem neglects the effect of any vertical loads. In the calculation U, the value of D (dead load) is ignored even though the value of the dead load was derived and shown on the previous page, page 31.

b. On page 32: The calculation of the moment capacity of the wall stem is based on a wall thickness of 11.25". However drawings described in paragraphs 14, 15 (page S6, detail C) indicate that the wall thickness is actually 10". Therefore there is a discrepancy between the design assumption on page 32 and the specified detail on page S6 of the drawings. The moment capacity based on the wall thickness of 10" does not meet the demand requirements and the wall is undersized.

c. The strength of concrete called out in the calculations on page 32 is $f'_c = 2500$ psi for the design of the retaining wall. However there is a discrepancy with the General Notes on the structural drawings which calls out concrete strength as $f'_c = 3000$ psi (Sheet S1 of the drawings described in paragraphs 14 and 15).

d. On page 37: Respondent failed to specify the angle of inclination of the rock anchor shown on this page or generate any calculations to determine the actual embedment lengths needed for both the bond zone and non-bond zone. While Respondent did indicate the methodology for determining the appropriate lengths on sheet S11 of the drawings described in paragraphs 14 and 15, Respondent failed to provide engineering analysis and justification for the final design.

e. On page 50: Respondent failed to include calculations as to how the wind loads were determined. Respondent included no justifications for the wind load values chosen. Furthermore Respondent omitted wind loads for an entire floor. Respondent assumed a conservative value for wind load which is more in line with engineering judgment than with rigorous engineering analysis or design. The distribution of lateral loads to the wood shear walls in the longitudinal direction was not shown or justified.

1 f. On page 57: The formula given for the calculation of uplift force, P_{up} , is incorrect.
2 Additionally, there was no derivation of the forces resisted by the shear walls. Respondent
3 assumed and failed to justify the forces used in the calculations.

4 SECOND CAUSE FOR DISCIPLINE

5 (Incompetence)

6 19. Respondent is subject to disciplinary action under section 6775(c) of the Code in that
7 Respondent was involved in incompetence in the practice of professional engineering. The set of
8 calculations described in paragraph 11, above, contain errors that constitute incompetence. The
9 errors in the calculations that constitute incompetence are as follows:

10 a. On pages 29 and 46: The cross sections of the building shown on pages 29 and 46 are
11 both missing one complete floor level. The design loads generated from this floor was omitted in
12 calculations related to lateral design presented on page 46.

13 b. On Page 36: The design of a critical new concrete retaining wall shown on this page
14 and on page S4 of the drawings described in paragraph 14 was completely omitted from the
15 calculations.

16 THIRD CAUSE FOR DISCIPLINE

17 (Negligence)

18 20. Respondent is subject to disciplinary action under section 6775(c) of the Code in that
19 Respondent was involved in negligence in the practice of professional engineering. The set of
20 calculations described in paragraph 12, above, contain errors that constitute negligence. The
21 errors in the calculations that constitute negligence are as follows:

22 a. On pages 24 to 25: The design of the mat slab is inconsistent with the design
23 drawings described in paragraphs 14 and 15 above. The spacing of the reinforcing rebar is closer
24 in the calculations (4 inches) than it is on Page S6 and S7 of the drawings (12 inches).

25 b. On page 33: The lateral soil pressure diagram present on this page and used for
26 design of the rear wall is inconsistent with the pressure diagram given on page 36 of the
27 calculations described in paragraph 11. The soil pressures shown on this page (page 33) do not
28

1 include the top 6 feet of soil pressure shown on page 36, consequently, the design values used
2 were incorrect.

3 c. On page 36: Respondent failed to specify the angle of inclination of the rock anchor
4 shown on this page or generate any calculations to determine the actual embedment lengths
5 needed for both the bond zone and non-bond zone. While Respondent did indicate the
6 methodology for determining the appropriate lengths on sheet S11 of the drawings described in
7 paragraphs 14 and 15, Respondent failed to provide engineering analysis and justification for
8 final design.

9 FOURTH CAUSE FOR DISCIPLINE

10 (Incompetence)

11 21. Respondent is subject to disciplinary action under section 6775(c) of the Code in that
12 Respondent was involved in incompetence in the practice of professional engineering. The set of
13 calculations described in paragraph 12, above, contain errors that constitute incompetence. The
14 errors in the calculations that constitute incompetence are as follows:

15 a. On page 21: The cross section of the building is missing one complete floor level.
16 The design loads generated from this missing floor were omitted in calculations.

17 FIFTH CAUSE FOR DISCIPLINE

18 (Negligence)

19 22. Respondent is subject to disciplinary action under section 6775(c) of the Code in that
20 Respondent was involved in negligence in the practice of professional engineering. The set of
21 calculations described in paragraph 13, above, contain errors that constitute negligence. The
22 errors in the calculations that constitute negligence are as follows:

23 a. On page 10: Respondent omitted the live load in the calculation of factored loads for
24 the existing footing that spans 6 feet. There is live load associated with the floor load to this part
25 of the slab and the wood framed floor attached to the deep beam footing (shown on page 9). The
26 live load does not add significantly to the overall total load but should have been considered and
27 included in the demand calculations.

28 ///

SIXTH CAUSE FOR DISCIPLINE

(Negligence)

23. Respondent is subject to disciplinary action under section 6775(c) of the Code in that Respondent was involved in negligence in the practice of professional engineering. The set of drawings described in paragraph 14, above, contain errors that constitute negligence. The errors in the calculations that constitute negligence are as follows:

a. On sheet S1 (General Notes Page): This page calls for different concrete strengths for different concrete elements. This page has concrete strengths of $f'_c=2,500$ psi for footings and slabs on grade, $f'_c= 3,000$ for "all other concrete", and $f'_c= 4,000$ for columns and waffle slabs. However the calculations for all concrete elements is based on concrete strength of $f'_c= 2,500$ psi. The calculations do not have concrete elements with $f'_c = 3000$ psi, and $f'_c = 4000$ psi despite being called out on the General Notes.

b. On sheet S4: The size of the temporary shoring beam shown on existing 2nd floor framing plan is not called out and the design of this beam was lacking in the calculations.

c. On sheet S6: There are two values given for the retaining wall thickness found in detail C. One value given is 10' and the next value is 11.25".

d. On sheet S7: In details B & C, the angle of inclination of the steel anchor and rock bolt are missing. In addition, the details of end anchorage bearing against the concrete wall are missing and were not designed.

SEVENTH CAUSE FOR DISCIPLINE

(Incompetence)

24. Respondent is subject to disciplinary action under section 6775(c) of the Code in that Respondent was involved in incompetence in the practice of professional engineering. The set of drawings described in paragraph 14, above, contain errors that constitute incompetence. The errors in the calculations that constitute incompetence are as follows: Detail A, on sheet S5, is missing a floor level.

///

///

EIGHTH CAUSE FOR DISCIPLINE

(Negligence)

25. Respondent is subject to disciplinary action under section 6775(c) of the Code in that Respondent was involved in negligence in the practice of professional engineering. The set of drawings described in paragraph 15, above, contain errors that constitute negligence. The errors in the calculations that constitute negligence are as follows:

a. On sheets A4 to A9: On the proposed 1st level floor plan on Sheet 4A, the new elevator is specified as 'New National Wheelvator "Epic" Residential Elevator.' This is in direct contrast to elevator specifications given on sheets A5 to A9, which call for a Concord Infinity Residential Elevator. There are no structural calculations or designs generated to determine if the wall studs, framing and the structural system is adequate or must be strengthened to support the new (Concord Infinity) elevator loads.

b. On sheet S1 (General Notes Page): This page calls for different concrete strengths for different concrete elements. This page has concrete strengths of $f'c=2,500$ psi for footings and slabs on grade, $f'c= 3,000$ for all other concrete, and $f'c= 4,000$ for columns and waffle slabs. However the calculations for all concrete elements is based on concrete strength of $f'c= 2,500$ psi. The calculations do not have concrete elements with $f'c = 3000$ psi, and $f'c = 4000$ psi despite being called out on the General Notes.

c. On sheet S4: The size of the temporary shoring beam shown on existing 2nd floor framing plan is not called out and the design of this beam was lacking in the calculations.

d. On sheet S6: There are two values given for the retaining wall thickness found in detail C. One value given is 10' and the next value is 11.25".

e. On sheet S7: In details B & C, the angle of inclination of the steel anchor and rock bolt are missing. In addition, the details of end anchorage bearing against the concrete wall are missing and were not designed.

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///

///

1 NINTH CAUSE FOR DISCIPLINE

2 (Incompetence)

3 26. Respondent is subject to disciplinary action under section 6775(c) of the Code in that
4 Respondent was involved in incompetence in the practice of professional engineering. The set of
5 drawings described in paragraph 15, above, contain errors that constitute incompetence. The
6 errors in the calculations that constitute incompetence are as follows: Detail A on sheet S5 is
7 missing a floor level.

8 TENTH CAUSE FOR DISCIPLINE

9 (Negligence)

10 27. Respondent is subject to disciplinary action under section 6775(c) of the Code in that
11 Respondent was involved in negligence in the practice of professional engineering. The set of
12 drawings described in paragraph 16, above, contain errors that constitute negligence. The errors
13 in the calculations that constitute negligence are as follows:

14 a. Sheets A5 to A9: The specific type of Concord Infinity Residential Elevator to
15 be installed in the subject residence is not called out in the drawings. There are no structural
16 calculations or design generated to determine if the wall studs, framing and the structural system
17 are adequate or must be strengthened to support the new elevator loads.

18 b. On sheet S1 (General Notes Page): This page calls for different concrete
19 strengths for different concrete elements. This page has concrete strengths of $f'c=2,500$ psi for
20 footings and slabs on grade, $f'c=3,000$ for "all other concrete", and $f'c=4,000$ for columns and
21 waffle slabs. However the calculations for all concrete elements is based on concrete strength of
22 $f'c=2,500$ psi. The calculations do not have concrete elements with $f'c=3000$ psi, and $f'c=$
23 4000 psi despite being called out on the General Notes.

24 c. On Sheet S2: Concrete specified under the "Concrete Quality" table does not
25 correspond to the values used in the calculations. Based on the calculations, all concrete strengths
26 should be $f'c=2,500$ psi.

27 f. On sheet S5: In details B & C, the angle of inclination of the steel anchor and
28 rock bolt are missing. In addition, the details of end anchorage bearing against the concrete wall

1 are missing and were not designed.

2 ELEVENTH CAUSE FOR DISCIPLINE

3 (Failure to Obtain Signed Contract)

4 28. Respondent is subject to disciplinary action under section Respondent is subject to
5 disciplinary action under sections 6775(h) and 6749 of the Code in that Respondent failed to
6 obtain a written contract signed by all of the parties. The written contract Respondent had with
7 Robert and Christina Adams for engineering services was never actually signed by the Adamses.

8 TWELFTH CAUSE FOR DISCIPLINE

9 (Failure to Appropriately Mark the Drawings and Calculations)

10 29. Respondent is subject to disciplinary action under section Respondent is subject to
11 disciplinary action under sections 6775(h) and 6735 of the Code in that Respondent failed to mark
12 the drawing and calculations described in paragraphs 11-16 as preliminary. Respondent stamped
13 all of the documents described in paragraphs 11-13, and 16, yet claims these documents were
14 incomplete, interim documents. However Respondent failed to mark "preliminary," "not for
15 construction," "for plan check only," "for review only," or some other similar notation indicating
16 the drawings and calculations were not complete.

17 PRAYER

18 WHEREFORE, Complainant requests that a hearing be held on the matters herein alleged,
19 and that following the hearing, the Board for Professional Engineers and Land Surveyors issue a
20 decision:

21 1. Revoking or suspending Civil Engineer License Number C 39743, issued to Thomas
22 Henry Lutge.

23 2. Revoking or suspending Structural Engineer License Number S 3160, issued to
24 Thomas Henry Lutge.

25 3. Ordering Thomas Henry Lutge to pay the Board for Professional Engineers and Land
26 Surveyors the reasonable costs of the investigation and enforcement of this case, pursuant to
27 Business and Professions Code section 125.3;

28 ///

1 4. Taking such other and further action as deemed necessary and proper.

2
3 DATED: 11/17/10

Original Signed

4 DAVID E. BROWN
5 Executive Officer
6 Board for Professional Engineers and Land Surveyors
7 Department of Consumer Affairs
8 State of California
9 Complainant

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